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L1	0	FILE ADISCTI
L2	0	FILE AGRICOLA
L3	0	FILE BIOBUSINESS
L4	0	FILE BIOCOMMERCE
L5	0	FILE BIOSIS
L6	0	FILE BIOTECHNO
L7	0	FILE CABA
L8	0	FILE CAPLUS
L9	0	FILE CBNB
L10	0	FILE CIN
L11	0	FILE CONFSCI
L12	0	FILE CROPB
L13	0	FILE CROPU
L14	0	FILE DISSABS
L15	0	FILE ESBIODBASE

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'BOD? (S)(LIGAND#'

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE#) (S) COVALENT?'

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L21	0	FILE GENBANK
L22	0	FILE IFIPAT
L23	0	FILE INVESTEXT
L24	0	FILE LIFESCI
L25	0	FILE NAPRALERT
L26	0	FILE NTIS
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L28	0	FILE PHIC
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L30	0	FILE PROMT
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L32	0	FILE USPATFULL
L33	0	FILE USPAT2
L34	0	FILE ADISINSIGHT
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L39	0	FILE CANCERLIT
L40	0	FILE CEABA-VTB
L41	0	FILE CEN
L42	0	FILE DGENE
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L44	0	FILE DRUGMONOG2
L45	0	FILE IMSDRUGNEWS
L46	0	FILE DRUGU
L47	0	FILE IMSRESEARCH
L48	0	FILE EMBAL
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L53	0	FILE KOSMET
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L59	0	FILE PCTGEN
L60	0	FILE PHAR
L61	0	FILE PHARMAML
L62	0	FILE RDISCLOSURE
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L66	0	FILE VETU
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TOTAL FOR ALL FILES

L68	0	OIL ADJ BOD? (S) (LIGAND# OR MOLECULE# OR PROTEIN# OR POLYPEPTIDE #) (S) COVALENT? AND (ISOLAT? OR PURIF? OR SEPARAT?)
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=> s oil (w) bod? (s) (ligand# or molecule# or protein# or polypeptide#) (s) covalent?
and (isolat? or purif? or separat?)

L69	0	FILE ADISCTI
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L72	0	FILE BIOCOMMERCE
L73	1	FILE BIOSIS

L74	1	FILE BIOTECHNO
L75	0	FILE CABA
L76	2	FILE CAPLUS
L77	0	FILE CBNB
L78	0	FILE CIN
L79	0	FILE CONFSCI
L80	0	FILE CROPB
L81	0	FILE CROPU
L82	0	FILE DISSABS
L83	1	FILE ESBIOBASE
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FIELD CODE - 'AND' OPERATOR ASSUMED 'BOD? (S) '		
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH		
FIELD CODE - 'AND' OPERATOR ASSUMED 'PEPTIDE#) (S) COVALENT?'		
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L95	1	FILE PASCAL
L96	0	FILE PHIC
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L98	3	FILE PROMT
L99	1	FILE SCISEARCH
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L101	3	FILE USPAT2
L102	0	FILE ADISINSIGHT
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L113	0	FILE IMSDRUGNEWS
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L116	0	FILE EMBAL
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L127	0	FILE PCTGEN
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L131	0	FILE SYNTHLINE
L132	0	FILE TOXCENTER
L133	0	FILE VETB
L134	0	FILE VETU
L135	1	FILE WPIDS

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L136 35 OIL (W) BOD? (S) (LIGAND# OR MOLECULE# OR PROTEIN# OR POLYPEPTID
E#) (S) COVALENT? AND (ISOLAT? OR PURIF? OR SEPARAT?)

=> dup rem l136

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INVESTEXT, ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2, IMSRESEARCH, IMSPRODUCT,
KOSMET, MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, RDISCLOSURE, SYNTHLINE'.
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PROCESSING COMPLETED FOR L136

L137 21 DUP REM L136 (14 DUPLICATES REMOVED)

=> d l137 1-21 ibib abs

L137 ANSWER 1 OF 21 USPATFULL on STN

ACCESSION NUMBER: 2004:12667 USPATFULL

TITLE: Enhancing the immune response to an antigen by
presensitizing with an inducing agent prior to
immunizing with the agent and the antigen

INVENTOR(S): Emtage, Peter, Boston, MA, UNITED STATES
Barber, Brian H., Mississauga, CA, UNITED STATES
Sambhara, Suryprakash, Decatur, GA, UNITED STATES
Sia, Charles Dwo Yuan, Toronto, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009185	A1	20040115
APPLICATION INFO.:	US 2003-168417	A1	20030520 (10)
	WO 2001-CA5		20010105
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Patrick J Halloran, Aventis Pasteur Inc, Knerr Building, One Discovery Drive, Swiftwater, PA, 18370		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	11 Drawing Page(s)		
LINE COUNT:	1545		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of enhancing an immune response is disclosed. Th method
involves an initial priming of the animal with an inducing agent,
subsequently followed by administration of an inducing agent-antigen
mixture. The antigen may be a tumour associated antigen, pathogenic
organism antigen, autoimmune antigen, immunogenic fragment thereof, or a
nucleic acid coding therefor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 2 OF 21 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1

ACCESSION NUMBER: 2003:105713 BIOSIS

DOCUMENT NUMBER: PREV200300105713

TITLE: Oil bodies and associated proteins as affinity matrices.

AUTHOR(S): Moloney, Maurice [Inventor, Reprint Author]; Boothe, Joseph
[Inventor]; Van Rooijen, Gijs [Inventor]

CORPORATE SOURCE: Calgary, Canada
ASSIGNEE: SemBioSys Genetics Inc., Calgary, Canada

PATENT INFORMATION: US 6509453 January 21, 2003

SOURCE: Official Gazette of the United States Patent and Trademark
Office Patents, (Jan 21 2003) Vol. 1266, No. 3.
<http://www.uspto.gov/web/menu/patdata.html>. e-file.
ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE: Patent

LANGUAGE: English

ENTRY DATE: Entered STN: 19 Feb 2003

Last Updated on STN: 19 Feb 2003

AB A method for the **separation** of a target molecule from a mixture is described. The method employs **oil bodies** and their associated **proteins** as affinity matrices for the selective, non-covalent binding of desired target **molecules**. The oil body proteins may be genetically fused to a ligand having specificity for the desired target molecule. Native oil body proteins can also be used in conjunction with an oil body protein specific ligand such as an antibody or an oil body binding protein. The method allows the **separation** and recovery of the desired target molecules due to the difference in densities between oil bodies and aqueous solutions

L137 ANSWER 3 OF 21 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 2

AN 10351905 IFIPAT;IFIUDB;IFICDB
 TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY MATRICES
 INVENTOR(S): Boothe; Joseph, Calgary, CA
 Moloney; Maurice, Calgary, CA
 Van Rooijen; Gijs, Calgary, CA
 PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Bay # 110, 2985-23rd Avenue
 N.E., Calgary, T1Y 7L3, CA
 AGENT: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET
 WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2003096320	A1	20030522
APPLICATION INFORMATION:	US 2002-260562		20021001

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
Section 371 PCT Filing of:	WO 1997-CA951	19971205	UNKNOWN
CONTINUATION-IN-PART of:	US 1996-767026	19961216	GRANTED
DIVISION of:	US 1999-319275	19990827	6509453
FAMILY INFORMATION:	US 2003096320	20030522	
	US 6509453		
DOCUMENT TYPE:	Utility		
	Patent Application - First Publication		
FILE SEGMENT:	CHEMICAL		
	APPLICATION		
NUMBER OF CLAIMS:	36 16 Figure(s).		

DESCRIPTION OF FIGURES:

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from *Arabidopsis thaliana* as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an *Arabidopsis* oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the *Arabidopsis* oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion protein on the oil body and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 oil body matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a ligand. Schematic diagram illustrating the configuration of the oleosin/ anti-oleosin/anti-IgG sandwich complex bound to an oil body.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type oil bodies complexed with primary anti-oleosin antibodies as a ligand (left) and binding of anti-IgG antibodies to oil bodies which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a *B. napus* oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, Gene, 31: 135-145)). The gene fusion is regulated by an Arabidopsis oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, Plant Mol. Biol. 21: 673-684). The sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

FIG. 9. Outline of the steps employed in the construction of pBIOOM3' containing the entire oleosin-metallothionein construct.

FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion protein on the oil body and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an oil body matrix from wildtype *B. carinata* seeds and *B. carinata* seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the oil body fraction of an oil body fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of protein A expressing *S. aureus* cells to oil bodies treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 μ l, 3, μ l, 30 μ l, 100 μ l of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the *S. aureus* protein A (The sequence is also shown in SEQ.ID. NO:8; The protein sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5' C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the protein A gene as contained within vector pRIT2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the protein A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

FIG. 14. Sequence of an Arabidopsis oleosin-protein A fusion (The sequence is also shown in SEQ.ID.NO:12 and the protein sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding protein A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

FIG. 15. Schematic diagram illustrating the configuration of the oleosin-protein A fusion protein on the oil body and binding of the immunoglobulin.

FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to oil body protein extracts obtained from transgenic *B. napus* lines expressing oleosin-protein A fusion proteins. Shown on a Western blot probed with an HRP-conjugated antibody are oil body protein extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4), opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-protein A fusion protein and a control untransformed *B. napus* line (lane 9), as well as lysates of *E. coli* DH5 alpha transformed with pRIT2T expressing protein A (lane 2) and untransformed *E. coli* DH5 alpha (lane 1).

AB A method for the **separation** of a target molecule from a mixture is described. The method employs oil bodies and their associated proteins as affinity matrices for the selective, noncovalent binding of desired target molecules. The oil body proteins may be genetically fused to a ligand having specificity for the desired target molecule. Native oil body proteins can also be used in conjunction with an oil body protein specific ligand such as an antibody or an oil body binding protein. The method allows the **separation** and recovery of the desired target molecules due to the difference in densities between oil bodies and aqueous solutions.

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from *Arabidopsis thaliana* as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an *Arabidopsis* oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, *Plant Mol. Biol.* 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the *Arabidopsis* oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGOBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion protein on the oil body and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 oil body matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a ligand. Schematic diagram illustrating the configuration of the oleosin/anti-oleosin/anti-IgG sandwich complex bound to an oil body.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type oil bodies complexed with primary anti-oleosin antibodies as a ligand (left) and binding of anti-IgG antibodies to oil bodies which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a *B. napus* oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, *Gene*, 31: 135-145)). The gene fusion is regulated by an *Arabidopsis* oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, *Plant Mol. Biol.* 21: 673-684). The sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

FIG. 9. Outline of the steps employed in the construction of pBIOOM3' containing the entire oleosin-metallothionein construct.

FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion protein on the oil body and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an oil body matrix from wildtype *B. carinata* seeds and *B. carinata* seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the oil body fraction of an oil body fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of protein A expressing *S. aureus* cells to oil bodies treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 μ l, 3 μ l, 30 μ l, 100 μ l of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the *S. aureus* protein A (The sequence is also shown in SEQ.ID. NO:8; The protein sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5'C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the protein A gene as contained within vector pRIT22T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the protein A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and

HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

FIG. 14. Sequence of an Arabidopsis oleosin-protein A fusion (The sequence is also shown in SEQ.ID.NO:12 and the protein sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding protein A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

FIG. 15. Schematic diagram illustrating the configuration of the oleosin-protein A fusion protein on the oil body and binding of the immunoglobulin.

FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to oil body protein extracts obtained from transgenic B. napus lines expressing oleosin-protein A fusion proteins. Shown on a Western blot probed with an HRP-conjugated antibody are oil body protein extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4), opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-protein A fusion protein and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing protein A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

L137 ANSWER 4 OF 21 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 3

AN 10349418 IFIPAT;IFIUDB;IFICDB
 TITLE: METHODS FOR THE PRODUCTION OF MULTIMERIC IMMUNOGLOBULINS, AND RELATED COMPOSITIONS
 INVENTOR(S): Moloney; Maurice, Calgary, CA
 Szarka; Steven, Calgary, CA
 Van Rooijen; Gijs, Calgary, CA
 PATENT ASSIGNEE(S): Unassigned
 AGENT: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET
 WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
	-----	--	-----
PATENT INFORMATION:	US 2003093832	A1	20030515
APPLICATION INFORMATION:	US 2002-176380		20020621

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
	-----	-----	-----
CONTINUATION-IN-PART of:	US 2001-6038	20011204	ABANDONED
CONTINUATION-IN-PART of:	US 2001-32201	20011219	PENDING

	NUMBER	DATE
	-----	-----
PRIORITY APPLN. INFO.:	US 2001-302885P	20010705 (Provisional)
FAMILY INFORMATION:	US 2003093832	20030515
DOCUMENT TYPE:	Utility	
	Patent Application - First Publication	
FILE SEGMENT:	CHEMICAL	
	APPLICATION	
NUMBER OF CLAIMS:	76 6 Figure(s).	

DESCRIPTION OF FIGURES:

FIG. 1 provides a listing of exemplary **proteins** for use in the heteromultimeric-fusion-**proteins** and heteromultimeric-proteincomplexes provided herein.

FIG. 2 Coomassie stained **protein** gel showing the partitioning of assembled antibody complexes with the **oil body** (OB) or the soluble undematant (U) fraction from wild type (wt) Arabidopsis C24 or transgenic SBS4803 seeds. The arrow indicates the high molecular weight antibody complexes in non-reduced samples **separated** by SDS-PAGE as

evident by the mouse IgG1 and **purified** D9 MAb control lanes.

FIG. 3. A) Coomassie stained gel of Arabidopsis total **protein** extracts showing reduced or non-reduced samples from wild type (wt) seeds and transgenic SBS4809 seeds expressing chimeric heavy and light antibody chains (Lines #6 and #13). Mouse (Mm) and human (Hu) samples of IgG1 antibody are included as controls. B) Western blots showing human heavy chain IgG Fc specific detection and human kappa chain-specific detection. Reduced samples were *****separated***** on SDS-PAGE to identify individual antibody chains, while non-reduced samples were **separated** to identify antibody assemblies of heavy and light chains **covalently** bound by disulfide bonds. Both heavy and light chains are detected in the assembled antibody complex (non-reduced samples; arrow). The migration of this complex is comparable to the mouse and human IgG1 control **protein**.

FIG. 4 (and SEQ ID NO:38) shows the amino acid sequence of the five immunoglobulin-binding domains in the **Protein A** sequence of Staphylococcus aureus.

FIG. 5 (and SEQ ID NO:39) shows the DNA and encoding amino acid sequence of the *****Protein***** A insert in pSBS2904.

FIG. 6. Individual wild type (wt) or transgenic safflower seeds were extracted and **oil body** (OB) and soluble undernatant (U) fractions were analyzed by Western blot. Detection was performed using a goat anti-human IgG Fc-specific secondary antibody (ICN Biomedicals Inc.). Seeds analyzed were from individual transgenic lines (**Protein A**-oleosin SBS4901, chimeric heavy and light chain SBS4810) or seeds resulting from the cross of the SBS4901 and SBS4810 transgenic lines. The double transgenic seed (SBS4810+SBS4901) and single transgenic seed (SBS4810 +/-) resulting from the cross are compared to the single transgenic lines.

AB Improved methods for the production of multimeric-protein complexes, such as redox proteins and immunoglobulins, in association with oil bodies are described. The redox protein is enzymatically active when prepared in association with the oil bodies. Also provided are related nucleic acids, proteins, cells, plants, and compositions.

CLMN 76 6 Figure(s).

FIG. 1 provides a listing of exemplary **proteins** for use in the heteromultimeric-fusion-**proteins** and heteromultimeric-protein complexes provided herein.

FIG. 2 Coomassie stained **protein** gel showing the partitioning of assembled antibody complexes with the **oil body** (OB) or the soluble undematant (U) fraction from wild type (wt) Arabidopsis C24 or transgenic SBS4803 seeds. The arrow indicates the high molecular weight antibody complexes in non-reduced samples **separated** by SDS-PAGE as evident by the mouse IgG1 and **purified** D9 MAb control lanes.

FIG. 3. A) Coomassie stained gel of Arabidopsis total **protein** extracts showing reduced or non-reduced samples from wild type (wt) seeds and transgenic SBS4809 seeds expressing chimeric heavy and light antibody chains (Lines #6 and #13). Mouse (Mm) and human (Hu) samples of IgG1 antibody are included as controls. B) Western blots showing human heavy chain IgG Fc specific detection and human kappa chain specific detection. Reduced samples were **separated** on SDS-PAGE to identify individual antibody chains, while non-reduced samples were **separated** to identify antibody assemblies of heavy and light chains **covalently** bound by disulfide bonds. Both heavy and light chains are detected in the assembled antibody complex (non-reduced samples; arrow). The migration of this complex is comparable to the mouse and human IgG1 control **protein**.

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FIG. 6. Individual wild type (wt) or transgenic safflower seeds were extracted and **oil body** (OB) and soluble undernatant (U) fractions were analyzed by Western blot. Detection was performed using a goat anti-human IgG Fc-specific secondary antibody (ICN Biomedicals Inc.). Seeds analyzed were from individual transgenic lines (

Protein A-oleosin SBS4901, chimeric heavy and light chain SBS4810) or seeds resulting from the cross of the SBS4901 and SBS4810 transgenic lines. The double transgenic seed (SBS4810+SBS4901) and single transgenic seed (SBS4810 +/-) resulting from the cross are compared to the single transgenic lines.

L137 ANSWER 5 OF 21 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 4

AN 10315497 IFIPAT;IFIUDB;IFICDB
 TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY MATRICES
 INVENTOR(S): Boothe; Joseph, Calgary, CA
 Moloney; Maurice, Calgary, CA
 Van Rooijen; Gijs, Calgary, CA
 PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Calgary, CA
 AGENT: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET
 WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2003059910	A1	20030327
APPLICATION INFORMATION:	US 2002-260960		20021001

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
Section 371 PCT Filing of:	WO 1997-CA951	19971205	UNKNOWN
CONTINUATION of:	US 1999-319275	19990827	PENDING
CONTINUATION-IN-PART of:	US 1996-767026	19961216	GRANTED
FAMILY INFORMATION:	US 2003059910	20030327	
DOCUMENT TYPE:	Utility		
	Patent Application - First Publication		
FILE SEGMENT:	CHEMICAL		
	APPLICATION		
NUMBER OF CLAIMS:	36	17 Figure(s).	

DESCRIPTION OF FIGURES:

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from *Arabidopsis thaliana* as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an *Arabidopsis* oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the *Arabidopsis* oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGOBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion protein on the oil body and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 oil body matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a ligand. Schematic diagram illustrating the configuration of the oleosin/ anti-oleosin/anti-IgG sandwich complex bound to an oil body.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type oil bodies complexed with primary anti-oleosin antibodies as a ligand (left) and binding of anti-IgG antibodies to oil bodies which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a *B. napus* oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, Gene, 31: 135-145)). The gene fusion is regulated by an *Arabidopsis* oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, Plant Mol. Biol. 21: 673-684). The

sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

FIG. 9. Outline of the steps employed in the construction of pBIOOM3' containing the entire oleosin-metallothionein construct.

FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion protein on the oil body and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an oil body matrix from wildtype *B. carinata* seeds and *B. carinata* seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the oil body fraction of an oil body fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of protein A expressing *S. aureus* cells to oil bodies treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 μ l, 3, μ l, 30 μ l, 100 μ l of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the *S. aureus* protein A (The sequence is also shown in SEQ.ID. NO:8; The protein sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5' C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the protein A gene as contained within vector pRIT2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the protein A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

FIG. 14. Sequence of an Arabidopsis oleosin-protein A fusion (The sequence is also shown in SEQ.ID.NO:12 and the protein sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding protein A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

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FIG. 17 illustrates binding and elution of IgGs to oil bodies isolated from wildtype *B. napus* (bn wt) and a transgenic *B. napus* line, expressing an oleosin protein A fusions. Error bars represent the results from 4 independent experiments.

AB A method for the **separation** of a target molecule from a mixture is described. The method employs oil bodies and their associated proteins as affinity matrices for the selective, noncovalent binding of desired target molecules. The oil body proteins may be genetically fused to a ligand having specificity for the desired target molecule. Native oil body proteins can also be used in conjunction with an oil body protein specific ligand such as an antibody or an oil body binding protein. The method allows the **separation** and recovery of the desired target molecules due to the difference in densities between oil bodies and aqueous solutions.

CLMN 36 17 Figure(s).

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SEQ.ID.NO:2.

FIG. 2. Sequence of an Arabidopsis oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the Arabidopsis oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

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FIG. 12. Illustrates the binding of protein A expressing S. aureus cells to oil bodies treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 μ l, 3, μ l, 30 μ l, 100 μ l of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the S. aureus protein A (The sequence is also shown in SEQ.ID. NO:8; The protein sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5'C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the protein A gene as contained within vector pRITZ2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the protein A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

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FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to oil body protein extracts obtained from transgenic B. napus lines expressing oleosin-protein A fusion proteins. Shown on a Western blot probed with an HRP-conjugated antibody are oil body protein extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4), opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-protein A fusion protein and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing protein A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

FIG. 17 illustrates binding and elution of IgGs to oil bodies isolated from wildtype B. napus (bn wt) and a transgenic B. napus line, expressing an oleosin protein A fusions. Error bars represent the results from 4 independent experiments.

L137 ANSWER 6 OF 21 USPATFULL on STN

ACCESSION NUMBER: 2003:239364 USPATFULL

TITLE: Methods for the production of multimeric protein complexes, and related compositions

INVENTOR(S): Rooijen, Gijs Van, Alberta, CANADA
Zaplachinski, Steven, Alberta, CANADA
Heifetz, Peter-Bernard, San Diego, CA, UNITED STATES
Briggs, Steven, Del Mar, CA, UNITED STATES
Dalmia, Bipin Kumar, San Diego, CA, UNITED STATES
Val, Greg Del, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003167524	A1	20030904
APPLICATION INFO.:	US 2001-32201	A1	20011219 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-6038, filed on 4 Dec 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-331363, filed on 19 Dec 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302885P	20010705 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HELLER EHRMAN WHITE & MCAULIFFE LLP, 4350 LA JOLLA VILLAGE DRIVE, 7TH FLOOR, SAN DIEGO, CA, 92122-1246	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	4597	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Improved methods for the production of multimeric-protein-complexes, such as redox proteins and immunoglobulins, in association with oil bodies are described. The redox protein is enzymatically active when prepared in association with the oil bodies. Also provided are related nucleic acids, proteins, cells, plants, and compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 7 OF 21 USPATFULL on STN

DUPLICATE 5

ACCESSION NUMBER: 2002:213447 USPATFULL
 TITLE: Products for topical applications comprising oil bodies
 INVENTOR(S): Deckers, Harm M., Calgary, CANADA
 Van Rooijen, Gijs, Calgary, CANADA
 Boothe, Joseph, Calgary, CANADA
 Goll, Janis, Calgary, CANADA
 Moloney, Maurice M., Calgary, CANADA
 PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Calgary, CANADA (non-U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002114820	A1	20020822
	US 6582710	B2	20030624
APPLICATION INFO.:	US 2002-58125	A1	20020129 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-577147, filed on 24 May 2000, PATENTED Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47753P	19970527 (60)
	US 1997-47779P	19970528 (60)
	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2238	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 8 OF 21 USPATFULL on STN

DUPLICATE 6

ACCESSION NUMBER: 2002:198244 USPATFULL
 TITLE: Products for topical applications comprising oil bodies
 INVENTOR(S): Deckers, Harm M., Calgary, CANADA
 Van Rooijen, Gijs, Calgary, CANADA
 Boothe, Joseph, Calgary, CANADA
 Goll, Janis, Calgary, CANADA
 Moloney, Maurice M., Calgary, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002106337	A1	20020808
	US 6599513	B2	20030729
APPLICATION INFO.:	US 2001-983546	A1	20011024 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PATENTED Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MICHELINE GRAVELLE, Bereskin & Parr, 40 King Street West, Box 401, Toronto, ON, M5H 3Y2	
NUMBER OF CLAIMS:	49	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2449	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 9 OF 21 USPATFULL on STN DUPLICATE 7
 ACCESSION NUMBER: 2002:140871 USPATFULL
 TITLE: Products for topical applications comprising oil bodies
 INVENTOR(S): Deckers, Harm M., Calgary, CANADA
 van Rooijen, Gijs, Calgary, CANADA
 Boothe, Joseph, Calgary, CANADA
 Goll, Janis, Calgary, CANADA
 Moloney, Maurice M., Calgary, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002071852	A1	20020613
	US 6596287	B2	20030722
APPLICATION INFO.:	US 2001-983540	A1	20011024 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MICHELINE GRAVELLE, Bereskin & Parr, 40 King Street West, Box 401, Toronto, M5H 3Y2	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2272	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 10 OF 21 USPATFULL on STN

ACCESSION NUMBER: 2002:140865 USPATFULL
TITLE: Vaccines comprising oil bodies
INVENTOR(S): Deckers, Harm M., Alberta, CANADA
Rooijen, Gijs Van, Alberta, CANADA
Boothe, Joseph, Alberta, CANADA
Goll, Janis, Alberta, CANADA
Moloney, Maurice M., Alberta, CANADA
Schryvers, Anthony B., Alberta, CANADA
Alcantara, Joenel, Alberta, CANADA
Hutchins, Wendy A., Alberta, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002071846	A1	20020613
APPLICATION INFO.:	US 2001-880901	A1	20010615 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)
	US 2000-212130P	20000616 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2348	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel adjuvants which comprise oil bodies. The invention also provides vaccine formulations comprising oil bodies and an antigen and methods for preparing the vaccines and the use of the vaccines to elicit an immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 11 OF 21 USPATFULL on STN

ACCESSION NUMBER: 2002:66652 USPATFULL
TITLE: Thioredoxin and thioredoxin reductase containing oil body based products
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
Rooijen, Gijs van, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA
Dalmia, Bipin K., San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037303	A1	20020328
APPLICATION INFO.:	US 2001-897898	A1	20010705 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, GRANTED, Pat. No. US 6183762 Continuation-in-part of Ser. No. US		

1998-84777, filed on 27 May 1998, GRANTED, Pat. No. US
6146645

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47753P	19970527 (60)
	US 1997-47779P	19970528 (60)
	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Stephen A. Bent, FOLEY & LARDNER, Washington Harbour, 3000 K Street, N.W., Suite 500, Washington, DC, 20007-5109	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	30 Drawing Page(s)	
LINE COUNT:	3368	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in a variety of products including food products, personal care products and pharmaceutical products. In a preferred embodiment the emulsions comprise thioredoxin and/or thioredoxin reductase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 12 OF 21 USPATFULL on STN
ACCESSION NUMBER: 2002:291078 USPATFULL
TITLE: Polynucleotides and polypeptides derived from corn ear
INVENTOR(S): Lalgudi, Raghunath V., Clayton, MO, United States
Ito, Laura Y., Pleasanton, CA, United States
Sherman, Bradley K., Oakland, CA, United States
PATENT ASSIGNEE(S): Incyte Genomics, Inc., Palo Alto, CA, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6476212	B1	20021105
APPLICATION INFO.:	US 1999-313294		19990514 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86722P	19980526 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Brusca, John S.	
ASSISTANT EXAMINER:	Moran, Marjorie A.	
LEGAL REPRESENTATIVE:	Incyte Genomics, Inc., Murry, Lynn E.	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	23084	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified, corn ear-derived polynucleotides (cdps) which encode corn ear-derived polypeptides (CDPs). The invention also provides for the use of cdps or their complements, oligonucleotides, or fragments in methods for determining altered gene expression, to recover regulatory elements, and to follow inheritance of desirable characteristics through hybrid breeding programs. The invention further provides for vectors and host cells containing cdps for the expression of CDPs. The invention additionally provides for (i) use of isolated and purified CDPs to induce antibodies and to screen libraries of compounds and (ii) use of anti-CDP antibodies in diagnostic assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 13 OF 21 USPATFULL on STN

ACCESSION NUMBER: 2002:81041 USPATFULL
TITLE: Products for topical applications comprising oil bodies
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
van Rooijen, Gijs, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA
PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Calgary, Alberta, CANADA
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6372234	B1	20020416
APPLICATION INFO.:	US 2000-577147		20000524 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, now patented, Pat. No. US 6183762 Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, now patented, Pat. No. US 6146645		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Dees, Jose' G.	
ASSISTANT EXAMINER:	Lamm, Marina	
LEGAL REPRESENTATIVE:	Bereskin & Parr, Gravelle, Micheline	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	2067	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provide novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L137 ANSWER 14 OF 21 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:787866 PROMT
TITLE: SEMBIOSYS GENETICS INC.
SOURCE: PR Newswire, (30 Oct 2001) pp. 251.
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 539
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB SEMBIOSYS GENETICS INC. RECEIVES US PATENT FOR ITS PLANT-BASED
SOMATOTROPIN PRODUCTION TECHNOLOGY
THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L137 ANSWER 15 OF 21 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:833670 PROMT
TITLE: SemBioSys Genetics Inc. to Receive \$5.5 Million From

Technology Partnerships Canada.
SOURCE: PR Newswire, (13 Nov 2001) .
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 422

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Repayable Contribution Will Support Development of Company's Plant-Based
THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L137 ANSWER 16 OF 21 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:787364 PROMT
TITLE: SemBioSys Genetics Inc. Receives U.S. Patent for Its
Plant-Based Somatotropin Production Technology.
SOURCE: PR Newswire, (30 Oct 2001) .
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 527

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB CALGARY, Alberta, Oct. 30 /PRNewswire/ --
THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L137 ANSWER 17 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2000-399905 [34] WPIDS
DOC. NO. CPI: C2000-120734
TITLE: New composition for improved topical delivery of an
active agent comprising an active agent and oil bodies
and reduced irritability.
DERWENT CLASS: B04 D16 D21
INVENTOR(S): BOOTHE, J; JUNGERMANN, E; MOLONEY, M M
PATENT ASSIGNEE(S): (SEMB-N) SEMBIOSYS GENETICS INC
COUNTRY COUNT: 91
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2000030602	A1	20000602	(200034)*	EN	50
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL					
OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES					
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS					
LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL					
TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 2000013700	A	20000613	(200043)		
EP 1131047	A1	20010912	(200155)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT					
RO SE SI					
MX 2001005276	A1	20020501	(200368)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2000030602	A1	WO 1999-CA1138	19991124
AU 2000013700	A	AU 2000-13700	19991124
EP 1131047	A1	EP 1999-972527	19991124
		WO 1999-CA1138	19991124
MX 2001005276	A1	WO 1999-CA1138	19991124
		MX 2001-5276	20010525

FILING DETAILS:

PATENT NO	KIND	PATENT NO

AU 2000013700 A Based on WO 2000030602
EP 1131047 A1 Based on WO 2000030602
MX 2001005276 A1 Based on WO 2000030602

PRIORITY APPLN. INFO: US 1998-109997P 19981125

AN 2000-399905 [34] WPIDS

AB WO 200030602 A UPAB: 20000718

NOVELTY - A composition (I) for the improved topical delivery of an agent is new and comprises:

- (1) an active agent; and
- (2) oil bodies.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the preparation of the composition (I).

USE - The composition (I) is useful for preparation of a medicament for the topical delivery of an active agent to a living organism (claimed), especially topical formulations for beautifying the skin or for treating skin conditions.

ADVANTAGE - The oil bodies enhance the percutaneous absorption or penetration of the active agent and the oil bodies reduce the irritability to the skin of the active agent (claimed).

Dwg.0/4

L137 ANSWER 18 OF 21 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 8

AN 03094135 IFIPAT;IFIUDB;IFICDB

TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY
MATRICES; **SEPARATION** OF TARGET MOLECULES
FROM MIXTURE

INVENTOR(S): van Rooijen, Gijs, Calgary, CA
Boothe, Joseph, Calgary, CA
Moloney, Maurice, Calgary, CA

PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Calgary, CA

PRIMARY EXAMINER: Grimes, Eric

AGENT: Bereskin & Parr

	NUMBER	PK	DATE
PATENT INFORMATION:	US 5856452	A	19990105
	(CITED IN 002 LATER PATENTS)		
APPLICATION INFORMATION:	US 1996-767026		19961216
EXPIRATION DATE:	16 Dec 2016		
FAMILY INFORMATION:	US 5856452		19990105
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	CHEMICAL		
	GRANTED		

MICROFILM REEL NO: 008441 FRAME NO: 0277

NUMBER OF CLAIMS: 25

GRAPHICS INFORMATION: 17 Drawing Sheet(s), 17 Figure(s).

AB A method for the **separation** of a target **molecule** from a mixture is described. The method employs **oil bodies** and their associated **proteins** as affinity matrices for the selective, non-covalent binding of desired target **molecules**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **molecule**. Native **oil body proteins** can also be used in conjunction with an **oil body protein specific ligand** such as an antibody or an **oil body binding protein**. The method allows the **separation** and recovery of the desired target **molecules** due to the difference in densities between **oil bodies** and aqueous solutions.

CLMN 25

GI 17 Drawing Sheet(s), 17 Figure(s).

L137 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:424269 CAPLUS

DOCUMENT NUMBER: 129:92578

TITLE: Oil bodies and associated proteins as affinity matrixes

INVENTOR(S): Moloney, Maurice; Boothe, Joseph; Van Rooijen, Gijs

PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Can.; Moloney, Maurice; Boothe, Joseph; Van Rooijen, Gijs

SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9827115	A1	19980625	WO 1997-CA951	19971205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5856452	A	19990105	US 1996-767026	19961216
AU 9852204	A1	19980715	AU 1998-52204	19971205
AU 739339	B2	20011011		
BR 9713727	A	20000125	BR 1997-13727	19971205
CN 1245503	A	20000223	CN 1997-181507	19971205
EP 1007554	A1	20000614	EP 1997-946991	19971205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001506241	T2	20010515	JP 1998-527134	19971205
NZ 336558	A	20010831	NZ 1997-336558	19971205
ZA 9711237	A	19980706	ZA 1997-11237	19971215
MX 9905596	A	20001130	MX 1999-5596	19990616
US 6509453	B1	20030121	US 1999-319275	19990827
US 2003059910	A1	20030327	US 2002-260960	20021001
US 2003096320	A1	20030522	US 2002-260562	20021001
PRIORITY APPLN. INFO.:			US 1996-767026	A2 19961216
			WO 1997-CA951	W 19971205
			US 1999-319275	A1 19990827

AB A method is described for the **sepn.** of a target mol. from a mixture. The method employs **oil bodies** and their associated **proteins** as affinity matrixes for the selective, non-covalent binding of desired target **mols.** The oil body proteins may be genetically fused to a ligand having specificity for the desired target mol. Native oil body proteins can also be used in conjunction with an oil body protein-specific ligand such as an antibody or an oil body binding protein. The method allows the **sepn.** and recovery of the desired target mols. due to the difference in densities between oil bodies and aqueous solns.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L137 ANSWER 20 OF 21 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN DUPLICATE

ACCESSION NUMBER: 1998:28123270 BIOTECHNO

TITLE: Characterization of the oligomeric behavior of a 16.5 kDa peanut oleosin by chromatography and electrophoresis of the iodinated form

AUTHOR: Pons L.; Olszewski A.; Gueant J.-L.

CORPORATE SOURCE: J.-L. Gueant, Lab. Pathol. Cell. Molec. Nutrition, EP CNRS 0616, Faculte de Medecine, B. P. 184, 54505 Vandoeuvre-les-Nancy Cedex, France.

SOURCE: Journal of Chromatography B: Biomedical Applications, (27 FEB 1998), 706/1 (131-140), 35 reference(s)

CODEN: JCBBEP ISSN: 0378-4347
PUBLISHER ITEM IDENT.: S0378434797005306
DOCUMENT TYPE: Journal; Conference Article
COUNTRY: Netherlands
LANGUAGE: English
SUMMARY LANGUAGE: English

AN 1998:28123270 BIOTECHNO

AB Oleosins are amphipathic **proteins** associated with **oil bodies** in seeds. We **purified** the major 16 500 peanut oleosin by preparative SDS-PAGE. Autoradiography after SDS-PAGE **separation** of the iodinated oleosin revealed **covalently** bound oligomers with M_r of 21 000, 33 000, 44 000 and 51 000. The strong capacity of these oligomers to form aggregates and to be incorporated into large-sized detergent micelles was demonstrated by gel permeation and isoelectric focusing. A 50% ethanol concentration was necessary to elute the 16 500 oleosin from octyl groups in hydrophobic interaction chromatography showing its natural tendency to interact with lipid acyl chains. This oligomerization behavior in aqueous solution is an indirect reflection of the interactions that occur in the **oil body**.

L137 ANSWER 21 OF 21 FSTA COPYRIGHT 2004 IFIS on STN

ACCESSION NUMBER: 1991(03):M0046 FSTA

TITLE: **Isolation** and characterization of a proteolipid in defatted rice bran.

AUTHOR: Sridhara, S.

CORPORATE SOURCE: Biophysical Chem. Sect., Dep. of Food Chem., Cent.

Food Tech. Res. Inst., Mysore, India

SOURCE: Nahrung, (1989) 33 (6) 565-573, 22 ref.

ISSN: 0027-769X

DOCUMENT TYPE: Journal

LANGUAGE: English

SUMMARY LANGUAGE: German; Russian

AB A proteolipid, **isolated** from defatted rice bran by the method of Folch et al. [Journal of Biological Chemistry (1957) 226, 497] (a mild method involving shaking a chloroform/methanol, 2:1 v/v, extract of rice bran with 1% w/v NaCl solution and collecting the fluffy layer at the interface), had a lipid:**protein** ratio of 1:1.8. The proteolipid contained 3.3% carbohydrate and 4.1% P (dry weight basis), and the apoprotein contained 3.6% carbohydrate but no P. The proteolipid was shown by PAGE to contain 2 **protein** components, one of which was more tightly bound than the other to the lipid moiety. 4 major **protein** bands appeared on SDS-urea PAGE, with apparent mol. weight of 62 000, 30 000, 21 000 and 14 000. The apoprotein was hydrophobic and contained 57.6% apolar, 16.3% acidic and 10.2% basic amino acids. The lipid moiety consisted of 62.9-74.4% phospholipids, 15.4-25.8% glycolipids and 10.3-11.2% neutral lipids. The interaction between **protein** and lipid is ascribed to hydrophobic and electrostatic bonds, and not to a **covalent** bond, since lipids were easily **separated** from the proteolipid by lyophilization followed by solvent extraction. The proteolipid was assumed not to be an artefact of **isolation**, but to be a component of the membranes that surround **oil bodies**.

=>

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		<i>DB=PGPB,USPT,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L4	oil adj bod\$ same (ligand? or molecule? or protein?) same covalent\$ and (isolat\$ or purif\$ or separat\$)	
<input type="checkbox"/>	L3	oil adj bod\$ same (ligand? or molecule? or protein?) and (isolat\$ or purif\$ or separat\$) same covalent\$	
<input type="checkbox"/>	L2	oil adj bod\$ same (ligand? or molecule? or protein?) and (isolat\$ or purif\$ or separat\$) and antibod\$	
<input type="checkbox"/>	L1	oil adj bod\$ same (ligand? or molecule? or protein?) and (isolat\$ or purif\$ or separat\$)	1

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Search Results - Record(s) 1 through 17 of 17 returned.

☐ 1. Document ID: US 20040009185 A1

Using default format because multiple data bases are involved.

L4: Entry 1 of 17

File: PGPB

Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009185

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040009185 A1

TITLE: Enhancing the immune response to an antigen by presensitizing with an inducing agent prior to immunizing with the agent and the antigen

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Emtage, Peter	Boston	MA	US	
Barber, Brian H.	Mississauga	CA	US	
Sambhara, Suryprakash	Decatur	GA	US	
Sia, Charles Dwo Yuan	Toronto		CA	

US-CL-CURRENT: [424/185.1](#); [424/236.1](#), [424/239.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: US 20030167524 A1

L4: Entry 2 of 17

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167524

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030167524 A1

TITLE: Methods for the production of multimeric protein complexes, and related compositions

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rooijen, Gijs Van	Alberta	CA	CA	
Zaplachinski, Steven	Alberta	CA	CA	
Heifetz, Peter-Bernard	San Diego	CA	US	
Briggs, Steven	Del Mar	CA	US	
Dalmia, Bipin Kumar	San Diego		US	
Val, Greg Del	San Diego		US	

US-CL-CURRENT: 800/281; 435/419

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 3. Document ID: US 20030096320 A1

L4: Entry 3 of 17

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030096320

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030096320 A1

ODP 10/260562

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: 435/7.5; 530/370, 530/400

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 4. Document ID: US 20030093832 A1

L4: Entry 4 of 17

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093832

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093832 A1

TITLE: Methods for the production of multimeric immunoglobulins, and related compositions

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Szarka, Steven	Calgary		CA	

Van Rooijen, Gijs	Calgary	CA
Moloney, Maurice	Calgary	CA

US-CL-CURRENT: 800/281; 435/419, 530/388.26, 800/288

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 5. Document ID: US 20030059910 A1

L4: Entry 5 of 17

File: PGPB

Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059910
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030059910 A1

10260960

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: 435/183; 424/192.1, 424/193.1, 530/413

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 6. Document ID: US 20020114820 A1

L4: Entry 6 of 17

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020114820
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020114820 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 7. Document ID: US 20020106337 A1

L4: Entry 7 of 17

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106337

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020106337 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/59; 424/60

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 8. Document ID: US 20020071852 A1

L4: Entry 8 of 17

File: PGPB

Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071852

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020071852 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401; 424/417, 426/601, 426/602, 426/605, 426/615, 426/629, 426/635, 426/80
514/937, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw Desc	Image
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☐ 9. Document ID: US 20020071846 A1

L4: Entry 9 of 17

File: PGPB

Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071846
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020071846 A1

TITLE: Vaccines comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Alberta		CA	
Rooijen, Gijs Van	Alberta		CA	
Boothe, Joseph	Alberta		CA	
Goll, Janis	Alberta		CA	
Moloney, Maurice M.	Alberta		CA	
Schryvers, Anthony B.	Alberta		CA	
Alcantara, Joenel	Alberta		CA	
Hutchins, Wendy A.	Alberta		CA	

US-CL-CURRENT: 424/184.1; 424/731, 424/750, 424/755, 424/757, 424/758, 424/764, 424/768

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw Desc	Image
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☐ 10. Document ID: US 20020037303 A1

L4: Entry 10 of 17

File: PGPB

Mar 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020037303
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020037303 A1

TITLE: Thioredoxin and thioredoxin reductase containing oil body based products

PUBLICATION-DATE: March 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary	CA	CA	
Rooijen, Gijs van	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	
Dalmia, Bipin K.	San Diego		US	

US-CL-CURRENT: 424/401

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 11. Document ID: US 6599513 B2

L4: Entry 11 of 17

File: USPT

Jul 29, 2003

US-PAT-NO: 6599513
DOCUMENT-IDENTIFIER: US 6599513 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
Van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/130.1, 424/400, 424/405, 424/450, 424/49, 424/59, 424/60, 424/62,
424/63, 424/642, 424/70.1 , 424/70.14, 424/70.21, 424/70.22, 424/70.27, 424/70.31, 424/94.61,
424/94.62, 424/94.63, 510/119, 510/135, 512/1, 512/2, 512/5, 514/159, 514/167, 514/168,
514/169, 514/2, 514/458, 514/474, 514/557, 514/725, 514/828, 514/845, 514/846, 514/847,
514/848, 514/882, 514/887

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 12. Document ID: US 6596287 B2

L4: Entry 12 of 17

File: USPT

Jul 22, 2003

US-PAT-NO: 6596287
DOCUMENT-IDENTIFIER: US 6596287 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/405, 424/450, 424/59, 424/62, 424/63, 424/727, 424/756,
424/757, 424/758, 424/776, 514/865, 514/887, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 13. Document ID: US 6582710 B2

L4: Entry 13 of 17

File: USPT

Jun 24, 2003

US-PAT-NO: 6582710

DOCUMENT-IDENTIFIER: US 6582710 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/405, 424/450, 424/49, 424/59, 424/60, 424/62, 424/63,
424/642, 424/70.1, 424/70.14 , 424/70.21, 424/70.22, 424/70.27, 424/70.31, 424/776, 510/119,
510/135, 512/1, 512/2, 512/5, 514/159, 514/167, 514/168, 514/169, 514/2, 514/458, 514/474,
514/557, 514/725, 514/828, 514/845, 514/846, 514/847 , 514/848, 514/882, 514/887, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 14. Document ID: US 6509453 B1

L4: Entry 14 of 17

File: USPT

Jan 21, 2003

US-PAT-NO: 6509453

DOCUMENT-IDENTIFIER: US 6509453 B1 ✓ ovp

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
Boothe; Joseph	Calgary			CA
Van Rooijen; Gijs	Calgary			CA

US-CL-CURRENT: 530/412; 435/183, 435/6, 435/7.1, 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KMC	Draw Desc	Image
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☐ 15. Document ID: US 6372234 B1

L4: Entry 15 of 17

File: USPT

Apr 16, 2002

US-PAT-NO: 6372234

DOCUMENT-IDENTIFIER: US 6372234 B1

**** See image for Certificate of Correction ****

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: April 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/450, 514/937, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KMC	Draw Desc	Image
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☐ 16. Document ID: US 5856452 A

L4: Entry 16 of 17

File: USPT

Jan 5, 1999

US-PAT-NO: 5856452

DOCUMENT-IDENTIFIER: US 5856452 A

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA

US-CL-CURRENT: 530/412; 435/262, 435/270, 435/272, 435/277

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KMC	Draw Desc	Image
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☐ 17. Document ID: WO 9827115 A1

L4: Entry 17 of 17

File: EPAB

Jun 25, 1998

PUB-NO: WO009827115A1

DOCUMENT-IDENTIFIER: WO 9827115 A1

TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY MATRICES

PUBN-DATE: June 25, 1998

INVENTOR-INFORMATION:

NAME	COUNTRY
MOLONEY, MAURICE	CA
BOOTHE, JOSEPH	CA
VAN, ROOIJEN GIJS	CA

INT-CL (IPC): C07 K 14/415; C07 K 1/22; C12 N 9/74; C07 K 16/06;

Hit List

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☐ 1. Document ID: US 20040016025 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 77

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040016025

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040016025 A1

TITLE: Rice promoters for regulation of plant expression

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Budworth, Paul	San Diego	CA	US	
Moughamer, Todd	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	
Goff, Stephen Arthur	Encinitas	CA	US	
Katagiri, Fumiaki	San Diego	CA	US	
Kreps, Joel	Carlsbad	CA	US	
Provart, Nicholas	Toronto	CA	CA	
Ricke, Darrell	San Diego	CA	US	
Zhu, Tong	San Diego		US	

US-CL-CURRENT: [800/287](#); [435/320.1](#), [435/419](#), [800/312](#), [800/320](#), [800/320.1](#), [800/320.2](#), [800/320.3](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMC	Draw Desc	Image
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☐ 2. Document ID: US 20040010817 A1

L2: Entry 2 of 77

File: PGPB

Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040010817

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040010817 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Mandeville	LA	US	
Schnurr, Judy	Coon Rapids	MN	US	
Browse, John A.	Palouse	WA	US	

US-CL-CURRENT: [800/281](#); [435/193](#), [435/320.1](#), [435/419](#), [435/69.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 3. Document ID: US 20040010815 A1

L2: Entry 3 of 77 File: PGPB Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040010815
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040010815 A1

TITLE: Identification and characterization of plant genes

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lange, B. Markus	San Diego	CA	US	
Ghassemian, Majid	Carlsbad	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	
Goff, Stephen Arthur	Encinitas	CA	US	
Katagiri, Fumiaki	San Diego	CA	US	
Kreps, Joel	Carlsbad	CA	US	
Moughamer, Todd	San Diego	CA	US	
Provart, Nicholas	Toronto	CA	CA	
Ricke, Darrell	San Diego	CA	US	
Zhu, Tong	San Diego		US	

US-CL-CURRENT: [800/278](#); [435/193](#), [435/419](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 4. Document ID: US 20040009476 A9

L2: Entry 4 of 77 File: PGPB Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009476
PGPUB-FILING-TYPE: corrected
DOCUMENT-IDENTIFIER: US 20040009476 A9

TITLE: Stress-regulated genes of plants, transgenic plants containing same, and methods of us

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Harper, Jeffrey F.	Del Mar	CA	US	
Kreps, Joel	Carlsbad	CA	US	
Wang, Xun	San Diego	CA	US	
Zhu, Tong	San Diego	CA	US	

US-CL-CURRENT: 435/6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 5. Document ID: US 20040009185 A1

L2: Entry 5 of 77

File: PGPB

Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009185
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040009185 A1

TITLE: Enhancing the immune response to an antigen by presensitizing with an inducing agent prior to immunizing with the agent and the antigen

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Emtage, Peter	Boston	MA	US	
Barber, Brian H.	Mississauga	CA	US	
Sambhara, Suryprakash	Decatur	GA	US	
Sia, Charles Dwo Yuan	Toronto		CA	

US-CL-CURRENT: 424/185.1; 424/236.1, 424/239.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 6. Document ID: US 20040003427 A1

L2: Entry 6 of 77

File: PGPB

Jan 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040003427
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040003427 A1

TITLE: Novel basal endosperm transfer cell layer (BELT) specific genes

PUBLICATION-DATE: January 1, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Thompson, Richard D.	Koln		DE	
Salamini, Francesco	Koln		DE	
Hueros, Gregorio	Madrid		ES	

US-CL-CURRENT: 800/278; 435/320.1, 435/419, 435/69.1, 530/370, 536/23.6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw Desc	Image
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☐ 7. Document ID: US 20030211511 A1

L2: Entry 7 of 77

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211511

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030211511 A1

TITLE: Nucleic acids and proteins with thioredoxin reductase activity

PUBLICATION-DATE: November 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Briggs, Steven P.	Del Mar	CA	US	
Dalmia, Bipin K.	San Diego	CA	US	
del Val, Greg	Encinitas	CA	US	
Desjarlais, John R.	Pasadena	CA	US	
Heifetz, Peter	San Diego	CA	US	
Luginbuhl, Peter	San Diego	CA	US	
Muchhal, Umesh	Monrovia	CA	US	

US-CL-CURRENT: 435/6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw Desc	Image
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☐ 8. Document ID: US 20030204870 A1

L2: Entry 8 of 77

File: PGPB

Oct 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030204870

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030204870 A1

TITLE: Alteration of oil traits in plants

PUBLICATION-DATE: October 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Allen, Stephen M.	Wilmington	DE	US	
Allen, William B.	Urbandale	IA	US	
Cahoon, Rebecca E.	Webster Groves	MO	US	
Epelbaum, Sabine	Wilmington	DE	US	
Famodu, Omolayo O.	Newark	DE	US	
Harvell, Leslie T.	Newark	DE	US	
Jones, Todd J.	Kent	WA	US	
Kinney, Anthony J.	Wilmington	DE	US	
Klein, Theodore M.	Wilmington	DE	US	
Li, Changjiang	Urbandale	IA	US	
Oliveira, Igor Cunha	Urbandale	IA	US	
Sakai, Hajime	Newark	DE	US	
Shen, Bo	Johnston	IA	US	
Tarczyński, Mitchell C.	West Des Moines	IA	US	

US-CL-CURRENT: [800/281](#); [435/194](#), [435/320.1](#), [435/419](#), [435/6](#), [435/69.1](#), [536/23.2](#), [554/9](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 9. Document ID: US 20030192077 A1

L2: Entry 9 of 77

File: PGPB

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030192077

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030192077 A1

TITLE: Production of silk-like proteins in plants

PUBLICATION-DATE: October 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Yang, Jianjun	Hockessin	DE	US	

US-CL-CURRENT: [800/288](#); [530/353](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 10. Document ID: US 20030177537 A1

L2: Entry 10 of 77

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030177537

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030177537 A1

TITLE: Expression of epidermal growth factor in plant seeds

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: 800/288; 530/399

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw Desc	Image
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☐ 11. Document ID: US 20030177529 A1

L2: Entry 11 of 77

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030177529

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030177529 A1

TITLE: Sugar and lipid metabolism regulators in plants II

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mittendorf, Volker	Durham	NC	US	
Haertel, Heiko	Durham	NC	US	
Cirpus, Petra	Mannheim		DE	

US-CL-CURRENT: 800/281

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw Desc	Image
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☐ 12. Document ID: US 20030170293 A1

L2: Entry 12 of 77

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170293

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030170293 A1

TITLE: Thermotolerant phytase for animal feed

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lanahan, Michael B.	Morrisville	NC	US	
Betts, Scott	Durham	NC	US	

US-CL-CURRENT: [424/442](#); [435/196](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 13. Document ID: US 20030167533 A1

L2: Entry 13 of 77

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167533

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030167533 A1

TITLE: Intein-mediated protein splicing

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Yadav, Narendra S.	Chadds Ford	PA	US	
Yang, Jianjun	Hockessin	DE	US	

US-CL-CURRENT: [800/288](#); [435/183](#), [435/468](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 14. Document ID: US 20030167531 A1

L2: Entry 14 of 77

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167531

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030167531 A1

TITLE: Expression and purification of bioactive, authentic polypeptides from plants

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Russell, Douglas A.	Madison	WI	US	
Schlittler, Michael	Wildwood	MO	US	

US-CL-CURRENT: [800/288](#); [530/351](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 15. Document ID: US 20030167524 A1

L2: Entry 15 of 77

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167524

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030167524 A1

TITLE: Methods for the production of multimeric protein complexes, and related compositions

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rooijen, Gijs Van	Alberta	CA	CA	
Zaplachinski, Steven	Alberta	CA	CA	
Heifetz, Peter-Bernard	San Diego	CA	US	
Briggs, Steven	Del Mar	CA	US	
Dalmia, Bipin Kumar	San Diego		US	
Val, Greg Del	San Diego		US	

US-CL-CURRENT: 800/281; 435/419

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 16. Document ID: US 20030166162 A1

L2: Entry 16 of 77

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030166162

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030166162 A1

TITLE: Method for cleavage of fusion proteins

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Van Rooijen, Gijs	Calgary		CA	
Alcantara, Joenel	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 435/69.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 17. Document ID: US 20030154512 A1

L2: Entry 17 of 77

File: PGPB

Aug 14, 2003

PGPUB-DOCUMENT-NUMBER: 20030154512
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030154512 A1

TITLE: Sugar and lipid metabolism regulators in plants III

PUBLICATION-DATE: August 14, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mittendorf, Volker	Durham	NC	US	
Haertel, Heiko A.	Durham	NC	US	
Cirpus, Petra	Mannheim		DE	

US-CL-CURRENT: 800/281

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 18. Document ID: US 20030135888 A1

L2: Entry 18 of 77

File: PGPB

Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030135888
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030135888 A1

TITLE: Genes that are modulated by posttranscriptional gene silencing

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Zhu, Tong	San Diego	CA	US	
Wang, Xun	San Diego	CA	US	
Chang, Hur-Song	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	
Goff, Stephen A.	Encinitas	CA	US	
Katagiri, Fumiaki	San Diego	CA	US	
Kreps, Joel	Carlsbad	CA	US	
Moughamer, Todd	San Diego	CA	US	
Provar, Nicholas	Toronto	CA	CA	
Ricke, Darrell	San Diego		US	

US-CL-CURRENT: 800/288; 435/320.1, 435/419, 536/23.2, 800/306, 800/320, 800/320.1, 800/320.2, 800/320.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 19. Document ID: US 20030135885 A1

L2: Entry 19 of 77

File: PGPB

Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030135885
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030135885 A1

TITLE: Self-processing plants and plant parts

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lanahan, Michael B.	Research Triangle Park	NC	US	
Basu, Shib Sankar	Apex	NC	US	
Batie, Christopher J.	Durham	NC	US	
Chen, Wen	Cary	NC	US	
Craig, Joyce	Pittsboro	NC	US	
Kinkema, Mark	Durham	NC	US	

US-CL-CURRENT: 800/284; 435/200, 435/320.1, 435/419, 435/6, 435/69.1, 536/23.2, 800/294

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 20. Document ID: US 20030135877 A1

L2: Entry 20 of 77

File: PGPB

Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030135877
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030135877 A1

TITLE: Sugar and lipid metabolism regulators in plants

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Haertel, Heiko A.	Durham	NC	US	
Mittendorf, Volker	Durham	NC	US	
Chen, Ruoying	Apex	NC	US	
Shank, Karin J.	Raleigh	NC	US	

US-CL-CURRENT: 800/278; 435/320.1, 435/419, 435/468, 536/24.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 21. Document ID: US 20030126631 A1

L2: Entry 21 of 77

File: PGPB

Jul 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030126631
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030126631 A1

TITLE: Preparation of heterologous proteins on oil bodies

PUBLICATION-DATE: July 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: 800/278; 435/455, 435/483, 435/69.8, 800/281, 800/288

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw Desc	Image
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☐ 22. Document ID: US 20030108609 A1

L2: Entry 22 of 77

File: PGPB

Jun 12, 2003

PGPUB-DOCUMENT-NUMBER: 20030108609
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030108609 A1

TITLE: Stable non-aqueous single phase viscous vehicles and formulations utilizing such vehicles

PUBLICATION-DATE: June 12, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Berry, Stephen A.	Hollister	CA	US	
Ferreira, Pamela J.	Redwood City	CA	US	
Dehnad, Houdin	El Granada	CA	US	
Muchnik, Anna	Belmont	CA	US	

US-CL-CURRENT: 424/486

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw Desc	Image
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☐ 23. Document ID: US 20030100743 A1

L2: Entry 23 of 77

File: PGPB

May 29, 2003

PGPUB-DOCUMENT-NUMBER: 20030100743
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030100743 A1

TITLE: Nucleic acids and proteins with thioredoxin reductase activity

PUBLICATION-DATE: May 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Dalmia, Bipin K.	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Val, Greg del	Encinitas	CA	US	
Desjarlais, John R.	Pasadena	CA	US	
Heifetz, Peter	San Diego	CA	US	
Luginbuhl, Peter	San Diego	CA	US	
Muchhal, Umesh	West Covina	CA	US	

US-CL-CURRENT: [536/23.1](#); [435/4](#), [530/300](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 24. Document ID: US 20030097685 A1

L2: Entry 24 of 77

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030097685
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030097685 A1

TITLE: Lipid metabolism regulators in plants

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Benning, Christoph	East Lansing	MI	US	
Cernac, Alex	East Lansing	MI	US	

US-CL-CURRENT: [800/281](#); [435/198](#), [435/320.1](#), [435/419](#), [435/6](#), [435/69.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 25. Document ID: US 20030097676 A1

L2: Entry 25 of 77

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030097676
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030097676 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Pullman	WA	US	
Schnurr, Judy	Pullman	WA	US	
Browse, John A.	Pullman	WA	US	

US-CL-CURRENT: [800/278](#); [435/320.1](#), [435/419](#), [536/23.6](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 26. Document ID: US 20030096320 A1

L2: Entry 26 of 77

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030096320

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030096320 A1

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: [435/7.5](#); [530/370](#), [530/400](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 27. Document ID: US 20030093832 A1

L2: Entry 27 of 77

File: PGPB

May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093832

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030093832 A1

TITLE: Methods for the production of multimeric immunoglobulins, and related compositions

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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Szarka, Steven	Calgary	CA
Van Rooijen, Gijs	Calgary	CA
Moloney, Maurice	Calgary	CA

US-CL-CURRENT: [800/281](#); [435/419](#), [530/388.26](#), [800/288](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 28. Document ID: US 20030084484 A1

L2: Entry 28 of 77

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084484
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030084484 A1

TITLE: Commercial use of arabidopsis for production of human and animal therapeutic and diagnostic proteins

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bascomb, Newell	Wayne	NJ	US	
Bossie, Mark	Robbinsville	NJ	US	
Skarjinskaia, Marina	Highland Park	NJ	US	
Hirayama, Lynne	Titusville	NJ	US	
Hall, Gerald	Morrisville	PA	US	
Petty, Thomas II	Ewing	NJ	US	
Golovko, Andrei	Westampton	NJ	US	
Campo, Melissa	Princeton Junction	NJ	US	

US-CL-CURRENT: [800/288](#); [435/419](#), [435/69.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 29. Document ID: US 20030084482 A1

L2: Entry 29 of 77

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030084482
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030084482 A1

TITLE: Production of proteins in plants

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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Hall, Gerald	Morrisville	PA	US
Bascomb, Newell	Brookside	NJ	US
Bossie, Mark	Robbinsville	NJ	US

US-CL-CURRENT: [800/288](#); [435/183](#), [435/320.1](#), [435/419](#), [435/69.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 30. Document ID: US 20030074689 A1

L2: Entry 30 of 77

File: PGPB

Apr 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030074689

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030074689 A1

TITLE: Methods for improving seed characteristics

PUBLICATION-DATE: April 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tarczyński, Mitchell C.	West Des Moines	IA	US	
Olsen, Odd-Arne	Johnston	IA	US	
Shen, Bo	Johnston	IA	US	
Lid, Stein E.	As	IA	NO	
Li, Changjiang	Urbandale	IA	US	
Jung, Rudolf	Des Moines	IA	US	
Gruis, Darren B.	Des Moines	IA	US	
Lorentzen, Jennifer A.	Des Moines	IA	US	
Ananiev, Evgueni	Johnston	PA	US	
Nichols, Scott E.	Westchester	IA	US	
Wang, Cunxi	Johnston		US	

US-CL-CURRENT: [800/278](#); [800/312](#), [800/320](#), [800/320.1](#), [800/320.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 31. Document ID: US 20030059910 A1

L2: Entry 31 of 77

File: PGPB

Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059910

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030059910 A1

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: [435/183](#); [424/192.1](#), [424/193.1](#), [530/413](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 32. Document ID: US 20030059802 A1

L2: Entry 32 of 77

File: PGPB

Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059802

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030059802 A1

TITLE: Nucleic acid and protein sequences of bovine epidermal growth factor

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bilodeau-Goeseels, Sylvie	Lethbridge		CA	
John, Sushil Jacob	Lethbridge		CA	
Selinger, Leonard Brent	Lethbridge		CA	
Benkel, Bernhard F.	Lethbridge		CA	

US-CL-CURRENT: [435/6](#); [435/320.1](#), [435/325](#), [435/69.1](#), [530/399](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 33. Document ID: US 20030037357 A1

L2: Entry 33 of 77

File: PGPB

Feb 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030037357

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030037357 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: February 20, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Pullman	WA	US	
Schnurr, Judy	Pullman	WA	US	
Browse, John A.	Pullman	WA	US	

US-CL-CURRENT: [800/278](#); [435/320.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 34. Document ID: US 20020182690 A1

L2: Entry 34 of 77

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020182690

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020182690 A1

TITLE: POLYHYDROXYALKANOATE BIOSYNTHESIS ASSOCIATED PROTEINS AND CODING REGION IN BACILLUS MEGATERIUM

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
CANNON, MAURA C.	AMHERST	MA	US	
CANNON, FRANCIS C.	AMHERST	MA	US	
MCCOOL, GABRIEL J.	NORTHAMPTON	MA	US	
VALENTINE, HENRY E.	CHESTERFIELD	MO	US	
GRUYS, KENNETH J.	CHESTERFIELD	MO	US	

US-CL-CURRENT: [435/135](#); [435/196](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 35. Document ID: US 20020160378 A1

L2: Entry 35 of 77

File: PGPB

Oct 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020160378

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020160378 A1

TITLE: Stress-regulated genes of plants, transgenic plants containing same, and methods of us

PUBLICATION-DATE: October 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Harper, Jeffrey F.	Del Mar	CA	US	
Kreps, Joel	Carlsbad	CA	US	
Wang, Xun	San Diego	CA	US	
Zhu, Tong	San Diego	CA	US	

US-CL-CURRENT: [435/6](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 36. Document ID: US 20020114820 A1

L2: Entry 36 of 77

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020114820

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020114820 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 37. Document ID: US 20020108149 A1

L2: Entry 37 of 77

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020108149

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020108149 A1

TITLE: Methods of increasing polypeptide accumulation in plants

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gruis, Darren B.	DesMoines	IA	US	
Jung, Rudolf	DesMoines	IA	US	

US-CL-CURRENT: 800/287; 530/370, 800/278, 800/288

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 38. Document ID: US 20020106337 A1

L2: Entry 38 of 77

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106337
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020106337 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: [424/59](#); [424/60](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 39. Document ID: US 20020100073 A1

L2: Entry 39 of 77

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020100073
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020100073 A1

TITLE: Expression of somatotropin in plant seeds

PUBLICATION-DATE: July 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice M.	Calgary		CA	
Habibi, Hamid R.	Calgary		CA	

US-CL-CURRENT: [800/278](#); [435/69.7](#), [530/350](#), [530/399](#), [536/23.4](#), [536/23.6](#), [800/288](#), [800/298](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 40. Document ID: US 20020088025 A1

L2: Entry 40 of 77

File: PGPB

Jul 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020088025
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020088025 A1

TITLE: Preparation of thioredoxin and thioredoxin reductase proteins on oil bodies

PUBLICATION-DATE: July 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice M.	Calgary	CA	CA	
Dalmia, Bipin K.	San Diego		US	

US-CL-CURRENT: 800/288; 435/69.8, 536/23.4, 800/291

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWOC	Draw. Desc	Image
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☐ 41. Document ID: US 20020071852 A1

L2: Entry 41 of 77File: PGPBJun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071852
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020071852 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401; 424/417, 426/601, 426/602, 426/605, 426/615, 426/629, 426/635, 426/80
514/937, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWOC	Draw. Desc	Image
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☐ 42. Document ID: US 20020071846 A1

L2: Entry 42 of 77File: PGPBJun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071846
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020071846 A1

TITLE: Vaccines comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Alberta		CA	
Rooijen, Gijs Van	Alberta		CA	
Boothe, Joseph	Alberta		CA	
Goll, Janis	Alberta		CA	
Moloney, Maurice M.	Alberta		CA	
Schryvers, Anthony B.	Alberta		CA	
Alcantara, Joenel	Alberta		CA	
Hutchins, Wendy A.	Alberta		CA	

US-CL-CURRENT: [424/184.1](#); [424/731](#), [424/750](#), [424/755](#), [424/757](#), [424/758](#), [424/764](#), [424/768](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 43. Document ID: US 20020037303 A1

L2: Entry 43 of 77

File: PGPB

Mar 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020037303

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020037303 A1

TITLE: Thioredoxin and thioredoxin reductase containing oil body based products

PUBLICATION-DATE: March 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary	CA	CA	
Rooijen, Gijs van	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	
Dalmia, Bipin K.	San Diego		US	

US-CL-CURRENT: [424/401](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 44. Document ID: US 6608242 B1

L2: Entry 44 of 77

File: USPT

Aug 19, 2003

US-PAT-NO: 6608242

DOCUMENT-IDENTIFIER: US 6608242 B1

TITLE: Production of silk-like proteins in plants

DATE-ISSUED: August 19, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yang; Jianjun	Hockessin	DE		

US-CL-CURRENT: [800/288](#); [530/300](#), [530/324](#), [530/350](#), [800/278](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw Desc	Image
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☐ 45. Document ID: US 6599513 B2

L2: Entry 45 of 77

File: USPT

Jul 29, 2003

US-PAT-NO: 6599513

DOCUMENT-IDENTIFIER: US 6599513 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
Van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: [424/401](#); [424/130.1](#), [424/400](#), [424/405](#), [424/450](#), [424/49](#), [424/59](#), [424/60](#), [424/62](#), [424/63](#), [424/642](#), [424/70.1](#), [424/70.14](#), [424/70.21](#), [424/70.22](#), [424/70.27](#), [424/70.31](#), [424/94.61](#), [424/94.62](#), [424/94.63](#), [510/119](#), [510/135](#), [512/1](#), [512/2](#), [512/5](#), [514/159](#), [514/167](#), [514/168](#), [514/169](#), [514/2](#), [514/458](#), [514/474](#), [514/557](#), [514/725](#), [514/828](#), [514/845](#), [514/846](#), [514/847](#), [514/848](#), [514/882](#), [514/887](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw Desc	Image
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☐ 46. Document ID: US 6596287 B2

L2: Entry 46 of 77

File: USPT

Jul 22, 2003

US-PAT-NO: 6596287

DOCUMENT-IDENTIFIER: US 6596287 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Deckers; Harm M.	Calgary	CA
van Rooijen; Gijs	Calgary	CA
Boothe; Joseph	Calgary	CA
Goll; Janis	Calgary	CA
Moloney; Maurice M.	Calgary	CA

US-CL-CURRENT: [424/401](#); [424/400](#), [424/405](#), [424/450](#), [424/59](#), [424/62](#), [424/63](#), [424/727](#), [424/756](#), [424/757](#), [424/758](#), [424/776](#), [514/865](#), [514/887](#), [516/53](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 47. Document ID: US 6582710 B2

L2: Entry 47 of 77

File: USPT

Jun 24, 2003

US-PAT-NO: 6582710

DOCUMENT-IDENTIFIER: US 6582710 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: [424/401](#); [424/400](#), [424/405](#), [424/450](#), [424/49](#), [424/59](#), [424/60](#), [424/62](#), [424/63](#), [424/642](#), [424/70.1](#), [424/70.14](#), [424/70.21](#), [424/70.22](#), [424/70.27](#), [424/70.31](#), [424/776](#), [510/119](#), [510/135](#), [512/1](#), [512/2](#), [512/5](#), [514/159](#), [514/167](#), [514/168](#), [514/169](#), [514/2](#), [514/458](#), [514/474](#), [514/557](#), [514/725](#), [514/828](#), [514/845](#), [514/846](#), [514/847](#), [514/848](#), [514/882](#), [514/887](#), [516/53](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 48. Document ID: US 6559359 B1

L2: Entry 48 of 77

File: USPT

May 6, 2003

US-PAT-NO: 6559359

DOCUMENT-IDENTIFIER: US 6559359 B1

**** See image for Certificate of Correction ****

TITLE: Plant retroviral polynucleotides and methods for use thereof

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Laten; Howard Mark	Arlington Heights	IL		

US-CL-CURRENT: 800/298; 435/320.1, 435/325, 435/410, 435/419, 435/468, 435/69.1, 536/23.1,
536/23.4, 536/23.72, 536/24.1 , 800/295

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw Desc	Image
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☐ 49. Document ID: US 6509453 B1

L2: Entry 49 of 77

File: USPT

Jan 21, 2003

US-PAT-NO: 6509453

DOCUMENT-IDENTIFIER: US 6509453 B1

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
Boothe; Joseph	Calgary			CA
Van Rooijen; Gijs	Calgary			CA

US-CL-CURRENT: 530/412; 435/183, 435/6, 435/7.1, 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw Desc	Image
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☐ 50. Document ID: US 6476212 B1

L2: Entry 50 of 77

File: USPT

Nov 5, 2002

US-PAT-NO: 6476212

DOCUMENT-IDENTIFIER: US 6476212 B1

**** See image for Certificate of Correction ****

TITLE: Polynucleotides and polypeptides derived from corn ear

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lalgudi; Raghunath V.	Clayton	MO		
Ito; Laura Y.	Pleasanton	CA		
Sherman; Bradley K.	Oakland	CA		

US-CL-CURRENT: 536/23.6; 435/6, 536/24.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Image	Claims	KMC	Draw Desc	Image
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☐ 51. Document ID: US 6372234 B1

L2: Entry 51 of 77

File: USPT

Apr 16, 2002

US-PAT-NO: 6372234

DOCUMENT-IDENTIFIER: US 6372234 B1

**** See image for Certificate of Correction ****

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: April 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/450, 514/937, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Image	Claims	KMC	Draw Desc	Image
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☐ 52. Document ID: US 6331416 B1

L2: Entry 52 of 77

File: USPT

Dec 18, 2001

US-PAT-NO: 6331416

DOCUMENT-IDENTIFIER: US 6331416 B1

TITLE: Process of expressing and isolating recombinant proteins and recombinant protein products from plants, plant derived tissues or cultured plant cells

DATE-ISSUED: December 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shani; Ziv	Rehovot			IL
Shoseyov; Oded	Karme Yosef			IL

US-CL-CURRENT: 435/69.7; 435/252.3, 435/320.1, 435/468, 435/69.1, 530/387.3, 536/23.1, 536/23

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Image	Claims	KMC	Draw Desc	Image
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☐ 53. Document ID: US 6288304 B1

L2: Entry 53 of 77

File: USPT

Sep 11, 2001

US-PAT-NO: 6288304

DOCUMENT-IDENTIFIER: US 6288304 B1

TITLE: Expression of somatotropin in plant seeds

DATE-ISSUED: September 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice M.	Calgary			CA
Habibi; Hamid R.	Calgary			CA

US-CL-CURRENT: 800/288; 435/468, 435/69.4, 435/69.7, 536/23.4, 536/23.51, 536/23.6, 800/278, 800/287, 800/306, 800/310, 800/312, 800/313, 800/314, 800/320.1, 800/322

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 54. Document ID: US 6210742 B1

L2: Entry 54 of 77

File: USPT

Apr 3, 2001

US-PAT-NO: 6210742

DOCUMENT-IDENTIFIER: US 6210742 B1

TITLE: Uses of oil bodies

DATE-ISSUED: April 3, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Mahmoud; Soheil	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 426/630; 426/302, 426/602, 426/615, 426/635, 426/89, 516/53

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 55. Document ID: US 6183762 B1

L2: Entry 55 of 77

File: USPT

Feb 6, 2001

US-PAT-NO: 6183762

DOCUMENT-IDENTIFIER: US 6183762 B1

TITLE: Oil body based personal care products

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: [424/401](#); [426/417](#), [426/601](#), [426/602](#), [426/605](#), [426/615](#), [426/629](#), [426/635](#), [426/80](#)
[514/937](#), [516/53](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 56. Document ID: US 6146645 A

L2: Entry 56 of 77

File: USPT

Nov 14, 2000

US-PAT-NO: 6146645

DOCUMENT-IDENTIFIER: US 6146645 A

**** See image for Certificate of Correction ****

TITLE: Uses of oil bodies

DATE-ISSUED: November 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Mahmoud; Soheil	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: [424/401](#); [426/417](#), [426/601](#), [426/602](#), [426/605](#), [426/615](#), [426/629](#), [426/635](#), [426/80](#)
[514/937](#), [516/53](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 57. Document ID: US 6143538 A

L2: Entry 57 of 77

File: USPT

Nov 7, 2000

US-PAT-NO: 6143538

DOCUMENT-IDENTIFIER: US 6143538 A

TITLE: Fatty acyl-CoA reductase

DATE-ISSUED: November 7, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Somerville; Chris R.	Portola Valley	CA		
Reiser; Steven E.	University City	MO		

US-CL-CURRENT: 435/189; 435/252.3, 435/320.1, 530/350, 536/23.2, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWMC	Draw Desc	Image
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☐ 58. Document ID: US 6137032 A

L2: Entry 58 of 77

File: USPT

Oct 24, 2000

US-PAT-NO: 6137032

DOCUMENT-IDENTIFIER: US 6137032 A

**** See image for Certificate of Correction ****

TITLE: Xylanase obtained from an anaerobic fungus

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheng; Kuo-Joan	Richmond			CA
Selinger; Leonard Brent	Lethbridge			CA
Liu; Jin-Hao	Calgary			CA
Hu; Youji	Gulph Mills	PA		
Forsberg; Cecil Wallace	Guelph			CA
Moloney; Maurice Martin	Calgary			CA

US-CL-CURRENT: 800/288; 435/200, 435/419, 800/278, 800/306

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWMC	Draw Desc	Image
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☐ 59. Document ID: US 6132711 A

L2: Entry 59 of 77

File: USPT

Oct 17, 2000

US-PAT-NO: 6132711

DOCUMENT-IDENTIFIER: US 6132711 A

**** See image for Certificate of Correction ****

TITLE: Enzymatic antioxidant of allene oxide for lipid peroxidation in biological systems

DATE-ISSUED: October 17, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Backhaus; Ralph A.	Phoenix	AZ		
Pan; Zhiqiang	Davis	CA		
Herickhoff; Lisa A.	Fort Collins	CO		

US-CL-CURRENT: [424/94.1](#); [514/2](#), [530/370](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw Desc	Image
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☐ 60. Document ID: US 6121034 A

L2: Entry 60 of 77

File: USPT

Sep 19, 2000

US-PAT-NO: 6121034

DOCUMENT-IDENTIFIER: US 6121034 A

**** See image for Certificate of Correction ****

TITLE: Coniothyrium minitans xylanase gene Cxyl

DATE-ISSUED: September 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Laroche; Andre J.	Lethbridge			CA
Huang; Timothy Y.	Lethbridge			CA
Frick; Michele M.	Lethbridge			CA
Lu; Zhen-Xiang	Lethbridge			CA
Huang; Hung Chang	Lethbridge			CA
Cheng; Kuo Joan	Richmond			CA

US-CL-CURRENT: [435/209](#); [435/252.3](#), [435/254.11](#), [435/255.5](#), [435/3](#), [435/320.1](#), [435/69.1](#), [536/23.536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw Desc	Image
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☐ 61. Document ID: US 6077992 A

L2: Entry 61 of 77

File: USPT

Jun 20, 2000

US-PAT-NO: 6077992

DOCUMENT-IDENTIFIER: US 6077992 A

TITLE: Binary viral expression system in plants

DATE-ISSUED: June 20, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yadav; Narendra S.	Chadds Ford	PA		

US-CL-CURRENT: 800/278; 435/320.1, 435/468, 435/69.1, 800/285, 800/287, 800/288, 800/298,
800/300, 800/302

Full	Title	Citation	Front	Review	Classification	Date	Reference	USPTO	USPTO	Claims	KMC	Draw Desc	Image
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☐ 62. Document ID: US 6022729 A

L2: Entry 62 of 77

File: USPT

Feb 8, 2000

US-PAT-NO: 6022729
DOCUMENT-IDENTIFIER: US 6022729 A

TITLE: Granule-associated proteins and methods for their use in polyhydroxyalkanoate biosynthesis

DATE-ISSUED: February 8, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Steinbuchel; Alexander	Altenberge			DE
Pieper-Furst; Ursula	Gottingen			DE

US-CL-CURRENT: 435/252.3; 435/252.33, 435/320.1, 435/471, 435/488, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	USPTO	USPTO	Claims	KMC	Draw Desc	Image
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☐ 63. Document ID: US 5985605 A

L2: Entry 63 of 77

File: USPT

Nov 16, 1999

US-PAT-NO: 5985605
DOCUMENT-IDENTIFIER: US 5985605 A

**** See image for Certificate of Correction ****

TITLE: DNA sequences encoding phytases of ruminal microorganisms

DATE-ISSUED: November 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheng; Kuo Joan	Lethbridge			CA
Selinger; Leonard Brent	Lethbridge			CA
Yanke; Lindsey Jay	Lethbridge			CA
Bae; Hee Dong	Seoul			KR
Zhou; Luming	Salt Lake City	UT		
Forsberg; Cecil Wallace	Guelph			CA

US-CL-CURRENT: [800/278](#); [435/196](#), [435/252.3](#), [435/252.31](#), [435/252.33](#), [435/254.11](#), [435/254.23](#),
[435/325](#), [435/419](#), [536/23.2](#), [536/23.7](#), [800/287](#), [800/288](#), [800/294](#), [800/306](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Image	Claims	KMC	Draw Desc	Image
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☐ 64. Document ID: US 5977436 A

L2: Entry 64 of 77

File: USPT

Nov 2, 1999

US-PAT-NO: 5977436

DOCUMENT-IDENTIFIER: US 5977436 A

**** See image for Certificate of Correction ****

TITLE: Oleosin 5' regulatory region for the modification of plant seed lipid composition

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Thomas; Terry L.	College Station	TX		
Li; Zhongsen	College Station	TX		

US-CL-CURRENT: [800/281](#); [435/252.3](#), [435/320.1](#), [435/419](#), [435/468](#), [435/69.1](#), [536/23.6](#), [536/24.1](#),
[800/278](#), [800/286](#), [800/287](#), [800/288](#), [800/298](#), [800/307](#), [800/312](#), [800/314](#), [800/317.3](#), [800/320.1](#),
[800/322](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Image	Claims	KMC	Draw Desc	Image
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☐ 65. Document ID: US 5948682 A

L2: Entry 65 of 77

File: USPT

Sep 7, 1999

US-PAT-NO: 5948682

DOCUMENT-IDENTIFIER: US 5948682 A

TITLE: Preparation of heterologous proteins on oil bodies

DATE-ISSUED: September 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: [435/483](#); [435/183](#), [435/214](#), [435/219](#), [435/254.2](#), [435/254.21](#), [435/320.1](#), [435/477](#),
[435/69.1](#), [435/69.2](#), [435/69.4](#), [435/69.52](#), [435/69.6](#), [435/69.7](#), [435/69.8](#), [435/70.1](#), [435/71.1](#),
[536/23.2](#), [536/23.4](#), [536/23.52](#), [536/23.6](#), [536/24.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Image	Claims	KMC	Draw Desc	Image
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☐ 66. Document ID: US 5948667 A

L2: Entry 66 of 77

File: USPT

Sep 7, 1999

US-PAT-NO: 5948667

DOCUMENT-IDENTIFIER: US 5948667 A

**** See image for Certificate of Correction ****

TITLE: Xylanase obtained from an anaerobic fungus

DATE-ISSUED: September 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheng; Kuo-Joan	Lethbridge			CA
Selinger; Leonard B.	Lethbridge			CA
Liu; Jin-Hao	Calgary			CA
Hu; Youji	Gulph Mills	PA		
Forsberg; Cecil Wallace	Guelph			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 435/200; 435/252.3, 435/254.11, 435/325, 536/23.2, 536/24.3

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 67. Document ID: US 5939303 A

L2: Entry 67 of 77

File: USPT

Aug 17, 1999

US-PAT-NO: 5939303

DOCUMENT-IDENTIFIER: US 5939303 A

TITLE: Phytases of ruminal microorganisms

DATE-ISSUED: August 17, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cheng; Kuo Joan	Lethbridge			CA
Selinger; Leonard Brent	Lethbridge			CA
Yanke; Lindsey Jay	Lethbridge			CA
Bae; Hee Dong	Seoul			KR
Zhou; Luming	Salt Lake City	UT		
Forsberg; Cecil Wallace	Guelph			CA

US-CL-CURRENT: 435/196; 424/94.6, 426/61, 426/635, 435/183, 435/195

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 68. Document ID: US 5856452 A

L2: Entry 68 of 77

File: USPT

Jan 5, 1999

US-PAT-NO: 5856452
DOCUMENT-IDENTIFIER: US 5856452 A

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA

US-CL-CURRENT: 530/412; 435/262, 435/270, 435/272, 435/277

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 69. Document ID: US 5792922 A

L2: Entry 69 of 77

File: USPT

Aug 11, 1998

US-PAT-NO: 5792922
DOCUMENT-IDENTIFIER: US 5792922 A

TITLE: Oil-body protein cis-elements as regulatory signals

DATE-ISSUED: August 11, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 800/281; 435/320.1, 536/24.1, 800/306, 800/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 70. Document ID: US 5650554 A

L2: Entry 70 of 77

File: USPT

Jul 22, 1997

US-PAT-NO: 5650554
DOCUMENT-IDENTIFIER: US 5650554 A

TITLE: Oil-body proteins as carriers of high-value peptides in plants

DATE-ISSUED: July 22, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA

US-CL-CURRENT: 800/288; 435/183, 435/320.1, 435/418, 435/419, 435/69.1, 435/69.2, 435/69.52,
435/69.6, 435/69.7, 435/69.8, 435/70.1, 435/71.1, 536/23.2, 536/23.4, 536/23.52, 536/23.6,
536/24.1, 800/298, 800/301, 800/302

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 71. Document ID: US 5084269 A

L2: Entry 71 of 77

File: USPT

Jan 28, 1992

US-PAT-NO: 5084269

DOCUMENT-IDENTIFIER: US 5084269 A

TITLE: Adjuvant for dose treatment with antigens

DATE-ISSUED: January 28, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kullenberg; Fred W.	Valley	NE	68064	

US-CL-CURRENT: 424/256.1; 424/204.1, 424/234.1, 424/283.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Image
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☐ 72. Document ID: WO 9827115 A1

L2: Entry 72 of 77

File: EPAB

Jun 25, 1998

PUB-NO: WO009827115A1

DOCUMENT-IDENTIFIER: WO 9827115 A1

TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY MATRICES

PUBN-DATE: June 25, 1998

INVENTOR-INFORMATION:

NAME	COUNTRY
MOLONEY, MAURICE	CA
BOOTHE, JOSEPH	CA
VAN, ROOIJEN GIJS	CA

INT-CL (IPC): C07 K 14/415; C07 K 1/22; C12 N 9/74; C07 K 16/06; C08 B 1/00; C07 H 21/00; C01 _
11/00; B01 D 15/08

EUR-CL (EPC): B01D015/08; C01G011/00, C07H021/00 , C07H021/00 , C07K001/22 , C07K014/415 ,
C07K016/06 , C08B001/00 , C12N009/74

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 73. Document ID: WO 9621029 A1

L2: Entry 73 of 77

File: EPAB

Jul 11, 1996

PUB-NO: WO009621029A1

DOCUMENT-IDENTIFIER: WO 9621029 A1

TITLE: OIL BODY PROTEINS AS CARRIERS OF HIGH VALUE PROTEINS

PUBN-DATE: July 11, 1996

INVENTOR-INFORMATION:

NAME

COUNTRY

MOLONEY, MAURICE

INT-CL (IPC): C12 N 15/82; C12 N 15/29; C12 N 15/57; C12 N 15/25; C12 N 15/15; C12 N 15/62; A H 5/00

EUR-CL (EPC): C07K014/61; C07K014/81, C12N009/64 , C12N015/82 , C07K014/545 , C07K014/815 , C12N009/74 , C12N015/82 , C12N015/82 , C12N015/82

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Clip Img	Ima
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☐ 74. Document ID: WO 9321320 A1

L2: Entry 74 of 77

File: EPAB

Oct 28, 1993

PUB-NO: WO009321320A1

DOCUMENT-IDENTIFIER: WO 9321320 A1

TITLE: Oil-body proteins as carriers of high-value peptides in plants

PUBN-DATE: October 28, 1993

INVENTOR-INFORMATION:

NAME

COUNTRY

MOLONEY, MAURICE M

CA

INT-CL (IPC): C12N 15/29; C12N 15/62; C12N 15/82; C12P 21/02; C12N 5/10; A01H 5/00

EUR-CL (EPC): C07K014/415; C07K014/61, C07K014/81 , C12N009/64 , C12N015/82 , C12N015/82 , C12N015/82 , C12N015/82

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 75. Document ID: KR 2003066732 A, WO 200250289 A1, AU 200232819 A, US 20030093832 A1, U 20030167524 A1, EP 1346056 A1, BR 200116220 A

L2: Entry 75 of 77

File: DWPI

Aug 9, 2003

DERWENT-ACC-NO: 2002-508806

DERWENT-WEEK: 200382

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TITLE: Producing oil body associated with recombinant multimeric protein complex e.g. redox proteins and immunoglobulins comprises producing recombinant polypeptides capable of forming the complex in cells comprising oil bodies

INVENTOR: BRIGGS, S P; DALMIA, B K ; DECKERS, H ; DEL VAL, G ; HEIFETZ, P B ; MOLONEY, M ; VA ROOIJEN, G ; ZAPLACHINSKI, S ; SZARKA, S ; BRIGGS, S ; HEIFETZ, P ; ROOIJEN, G V ; VAL, G D

PRIORITY-DATA: 2001US-0006038 (December 4, 2001), 2000US-0742900 (December 19, 2000), 2001US-302885P (July 5, 2001), 2001US-0032201 (December 19, 2001), 2002US-0176380 (June 21, 2002), 2000US-0331363 (December 19, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 2003066732 A	August 9, 2003		000	C07K019/00
WO 200250289 A1	June 27, 2002	E	362	C12N015/79
AU 200232819 A	July 1, 2002		000	C12N015/79
US 20030093832 A1	May 15, 2003		000	A01H005/00
US 20030167524 A1	September 4, 2003		000	A01H005/00
EP 1346056 A1	September 24, 2003	E	000	C12N015/79
BR 200116220 A	September 23, 2003		000	C12N015/79

INT-CL (IPC): A01 H 5/00; C07 K 16/40; C07 K 19/00; C12 N 5/04; C12 N 15/79

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 76. Document ID: US 5948682 A

L2: Entry 76 of 77

File: DWPI

Sep 7, 1999

DERWENT-ACC-NO: 1999-517960

DERWENT-WEEK: 200382

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TITLE: Expression of a heterologous polypeptide on an oil body protein is useful for the production of e.g. enzymes, antibodies, hormones

INVENTOR: MOLONEY, M M

PRIORITY-DATA: 1997US-0846021 (April 25, 1997), 1991US-0659835 (February 22, 1991), 1993US-0142418 (November 16, 1993), 1994US-0366783 (December 30, 1994)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5948682 A	September 7, 1999		048	C12N015/81

INT-CL (IPC): C12 N 15/12; C12 N 15/29; C12 N 15/62; C12 N 15/81

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 77. Document ID: WO 9621029 A1, ZA 9510999 A, AU 9642950 A, US 5650554 A, BR 9600006 A,

EP 871749 A1, AU 709141 B

L2: Entry 77 of 77

File: DWPI

Jul 11, 1996

DERWENT-ACC-NO: 1996-334004

DERWENT-WEEK: 200382

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TITLE: Expressing recombinant polypeptide as fusion with oil body protein - allowing easy sep in a lipid phase, for improving quality of seed meal or for prodn. of therapeutic and other proteins

INVENTOR: MOLONEY, M; MOLONEY, M M

PRIORITY-DATA: 1994US-0366783 (December 30, 1994), 1991US-0659835 (February 22, 1991), 1993US 0142418 (November 16, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9621029 A1	July 11, 1996	E	098	C12N015/82
ZA 9510999 A	September 25, 1996		088	A01H000/00
AU 9642950 A	July 24, 1996		000	C12N015/82
US 5650554 A	July 22, 1997		037	A01H005/00
BR 9600006 A	January 21, 1998		000	C07K014/415
EP 871749 A1	October 21, 1998	E	000	C12N015/82
AU 709141 B	August 19, 1999		000	C12N015/82

INT-CL (IPC): A01 H 0/00; A01 H 5/00; A01 H 5/10; C07 K 14/415; C07 K 14/81; C07 K 123/00; C0 M 7/00; C12 N 5/04; C12 N 5/14; C12 N 15/11; C12 N 15/15; C12 N 15/25; C12 N 15/29; C12 N 15/57; C12 N 15/62; C12 N 15/82; C12 P 0/00

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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BOD	6273
BODA	672
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BODAB	1
BODABILITY	3
BODACH	24
BODACH-CHARLES-M	1
(OIL ADJ BOD\$ SAME (LIGAND? OR MOLECULE? OR PROTEIN?) AND (ISOLAT\$ OR PURIF\$ OR SEPARAT\$) AND	77

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